

This list of helpful resources can help provide background information for anyone who might want to learn more about the practices presented in the suite.

## EDUCATIONAL TELEVISION PROGRAMMING

### [Sid the Science Kid on PBS](#) ↗

Sid the Science Kid helps prepare children for school by exposing them to science in a comfortable and enjoyable way. Children will discover basic, yet important, concepts such as change and growth. This type of early exposure to science can inspire a lifetime of learning and exploration.

## WEB RESOURCES

### [MESS: Introduction](#) ↗

This introduction explains the value of focusing on science in early childhood and how science can foster competencies across all domains of development as well as teacher resources teachers in the guides, and how to use them effectively in an early learning classroom.

### [Science Webcast Series #1: Let's Do Science!](#) ↗

### [Science Webcast Series #2: Look What I Know. See What I Can Do!](#) ↗

### [Science Webcast Series #3: Language & Literacy Through Science](#) ↗

### [Science Webcast Series #4: Bring it All Together in Effective Environments](#) ↗

### [A Head Start on Science](#) ↗

Head Start moves to help children retain a “sense of wonder” through “A Head Start on Science” program, which links colleges and universities with Head Start programs to facilitate a lifelong interest in science. Written for Head Start teachers, assistants, home visitors, children and their families, the article provides an overview of the program that works to expand children’s perceptions of the world by learning ways to observe day-to-day phenomena.

### [Ramps and Pathways: Developmentally Appropriate, Intellectually Rigorous, and Fun Physical Science](#) ↗

The authors have spent many years providing professional development in the area of science education, working alongside teachers and observing children in the classroom. These experiences have convinced them that activities involving inclined planes are possibly the best science activities they have ever encountered. They call their collection of classroom activities involving inclined planes Ramps and Pathways.

### [Resources for Teaching and Learning about the Natural World](#) ↗

List of resources

### [Resources for Science in the Early Years](#) ↗

List of resources

↗ Online resource: click to open in a browser.



## ARTICLES

- American Association for the Advancement of Science / Project 2061. (1999). *Dialogue on early childhood science, mathematics, and technology education*. Washington, DC: American Association for the Advancement of Science.
- Bell, P., Lewenstein, B., Shouse, A. and Feder, M. (Eds.). (2009). *Learning Science in Informal Environments: People, Places, and Pursuits*. Committee on Learning Science in Informal Environments. Washington, DC: National Academy Press.
- Brenneman, K., Stevenson-Boyd, J., and Frede, E. C. (2009). *Math and science in preschool: Policies and practice*. Preschool Policy Brief, 19. New Brunswick, NJ: National Institute for Early Education Research.
- Conezio, K., and French, L. (2002) *Science in the preschool classroom: Capitalizing on children's fascination with the everyday world to foster language and literacy development*. Young Children. NAEYC.
- Dorph, R., Goldstein, D., Lee, S., Lepori, K., Schneider, S., Venkatesan, S. (2007). The status of science education in the Bay Area: Research brief. Lawrence Hall of Science, UC Berkeley; California.
- Duschl, R.A., Schweingruber, and A.W. Shouse (Eds.). (2007). *Taking science to school: Learning and teaching science in grades K-8*. Committee on Science Learning, K-8. Washington, DC: National Academy Press.
- Gallas, K. 1995. *Talking their way into science: Hearing children's questions and theories, responding with curricula*. New York: Teachers College Press.
- Greenfield, D. B., Jirout, J., Domínguez, X., Greenberg, A., Maier, M. F., and Fuccillo, J. M. (2009). *Science in the preschool classroom: A programmatic research agenda to improve science readiness*. Early Education and Development, 20, 238-264.
- Metz, K. E. (1995). *Reassessment of developmental constraints on children's science instruction*. Review of Educational Research, 65(2), 93-127.
- Metz, K. E. (2008). *Narrowing the gulf between the practices of science and the elementary school science classroom*. Elementary School Journal, 109(2), 138-161.
- Metz, K. E. (2009). *Rethinking what is "developmentally appropriate" from a learning progression perspective: The power and the challenge*. Review of Science, Mathematics and ICT Education, 3(1), 5-22.
- Michaels, S., Shouse, A.W., and Schweingruber, H.A. (2008) *Ready, set, science: Putting research to work in K-8 science classrooms*. Washington, DC: National Academy Press. 197 pages.
- Reddy, M., Jacobs, P., McCrohon, C., and Herrenkohl, L. R. (1998). *Creating scientific communities in the elementary classroom*. Portsmouth, NH: Heinemann.
- Stegelin, D. A. (2003). *Application of the Reggio Emilia approach to early childhood science curriculum*. Early Childhood Education Journal, 30(3), 163-169.